Annual Report

of the

SASKATCHEWAN

CANCER

FOUNDATION

April 1, 1985 to March 31, 1986

87-05825/

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BOARD OF DIRECTORS

Mr. E. I. Schwartz
Chairman

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Mr. J. Craig

Dr. I. E. Daunt

Mrs. E. Green

Mr. G. F. McCallum

Dr. R. G. Murray

Ms. L. Perrin

Dr. D. J. Philippon

Mrs. J. Turko

Honourable G. McLeod
Minister of Health
Province of Saskatchewan
Legislative Building
REGINA, Saskatchewan
S4S 0B3

Dear Mr. McLeod:

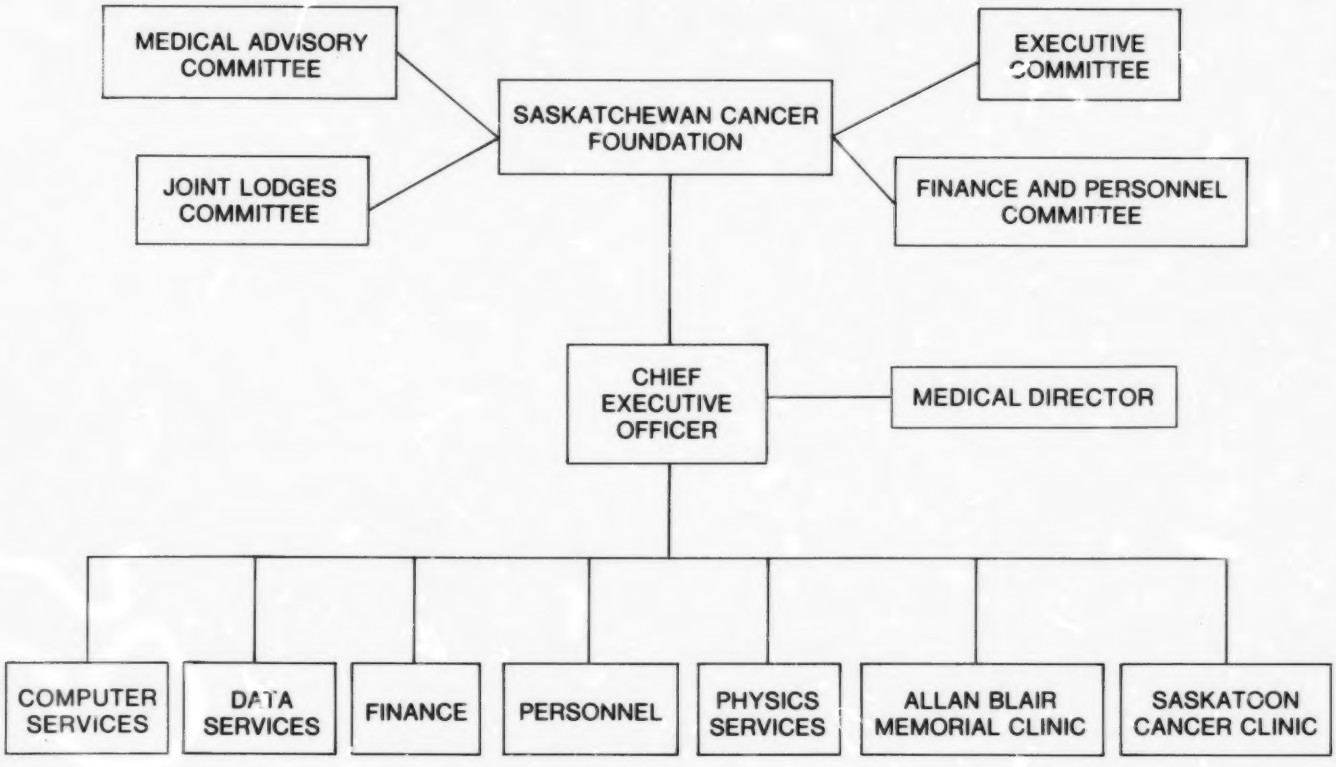
As Chairman of the Saskatchewan Cancer Foundation, I have the honour to submit herewith the report on the activities of the Foundation for the fiscal year ending March 31, 1986.

On behalf of the Foundation's Board of Directors, I would like to extend to you and your colleagues our appreciation for the continued support of the Saskatchewan Cancer Program. You and your staff have been most co-operative in assisting the Foundation in administrative and financial matters. In particular, we would like to thank your predecessor the Honourable Graham Taylor and the staff of the Health Department for their co-operation and assistance during the past year.

Respectfully submitted,

E. I. Schwartz
Chairman

ORGANIZATION CHART



MEDICAL ADVISORY COMMITTEE

Dr. D. J. Klaassen — Chairman
Dr. G. R. Armitage
Dr. B. P. D. Colquhoun
Dr. W. N. Huber
Dr. S. K. Liem
Dr. G. R. Spooner
Dr. A. K. S. Teckchandani
Dr. H. G. Whiston

JOINT LIAISON COMMITTEE

Mr. E. I. Schwartz — Chairman
Mr. P. H. Peters

EXECUTIVE COMMITTEE

Mr. E. I. Schwartz — Chairman
Dr. J. L. Blackburn — Vice-Chairman
Dr. R. B. Baltzan
Mr. G. F. McCallum
Dr. R. G. Murray

FINANCE AND PERSONNEL COMMITTEE

Dr. J. L. Blackburn — Chairman
Mr. J. Craig
Mrs. E. Green
Mr. E. I. Schwartz
Mrs. J. Turko

ORGANIZATION

ADMINISTRATION
Mr. P. H. Peters
— *Executive Director*
Mrs. J. M. Gebert
— *Administrative Assistant*
Miss S. O. Fedoruk
— *Director of Physics Services*
Mrs. V. J. Lusk
— *Director of Finance*
Mr. W. G. Sharp
— *Associate Director of Finance*
Mrs. M. J. Wenman
— *Accounting Clerk*
Mrs. D. A. Lauridsen
— *Payroll Clerk*
Mr. O. H. Pratt
— *Director of Personnel*
Mrs. S. H. Tompkins
— *Personnel Clerk*
Mrs. D. L. Robson
— *Director of Data Services*
Mr. D. L. Benson
— *Director of Computer Services*
Mr. R. L. Robinson
— *Programmer Analyst*

ALLAN BLAIR MEMORIAL CLINIC
Dr. H. G. Whiston
— *Director*
Mr. J. A. Grill
— *Business Manager*

SASKATOON CANCER CLINIC
Dr. D. J. Klaassen
— *Director*
Miss O. Belovanoff
— *Business Manager*

The Saskatchewan Cancer Foundation has established several sub-committees to facilitate the carrying out of its mandate. The Executive Committee of the Foundation is composed of the Chairman, Vice-Chairman and three other members. It considers any urgent business of the Foundation that may arise between regular meetings of the Foundation. The Medical Advisory Committee advises the Foundation on the provision of medical services and other related matters. Its membership includes the Medical Directors of the cancer clinics, two full-time physicians on the clinic staff, three specialists in private practice and two general practitioners as determined by agreement with the College of Physicians and Surgeons of Saskatchewan and one representative from the College of Medicine. At least ten and not more than seventeen members may be appointed to the committee. The Finance and Personnel Committee consists of the Chairman — ex officio, and four other members of the Foundation. It makes recommendations regarding the financial operation of the program, as well as personnel matters including salary and fringe benefits of staff. The Joint Liaison Committee is a joint committee of the Saskatchewan Cancer Foundation and the Canadian Cancer Society, Saskatchewan Division. Its role is to address matters which are of mutual concern to the two organizations. The Chairman and Executive Director represent the Saskatchewan Cancer Foundation as members of this committee.

The development and operation of the Saskatchewan Cancer Program is the responsibility of the Saskatchewan Cancer Foundation. It employs a chief executive officer who is responsible for implementing the policies of the Foundation and for the ongoing operation of the program.

The Foundation maintains two service outlets -- the Allan Blair Memorial Clinic in Regina and the Saskatoon Cancer Clinic. The clinics provide full diagnostic services, treatment services in radiotherapy and chemotherapy, and follow-up services. The clinics also serve as centres for the co-ordination of a comprehensive and multi-disciplinary approach for all aspects of care and treatment for the cancer patients.

The staff works closely with the patient's family physician, consulting physician and surgeon and other persons not directly employed by the Foundation to ensure the provision of high quality treatment and follow-up care.

ORGANIZATION

Objectives

The objectives of the Saskatchewan Cancer Foundation are:

- the operation of cancer clinics for the examination, diagnosis and treatment of cancer patients
- the education of the public in the importance of the early diagnosis, prevention and treatment of cancer
- the training of technical personnel to assist in the examination, diagnosis, treatment and study of cancer and the provision of facilities for undergraduate and post-graduate study relating to cancer
- the conduct of and participation in research projects in the diagnosis, prevention and treatment of cancer
- the establishment, maintenance and operation of hostels in connection with the clinics

Eligibility and Benefits

To be eligible for benefits under the Cancer Control Program, a patient must be a resident of the province for three months and must be formally admitted to the program by his/her doctor. For landed immigrants and some special residents returning to Canada, this period is reduced to one day. Details on policies governing admission to the program, and payment of services, are included on Page 41.

There is no charge to eligible patients for diagnostic and treatment services received at the cancer clinics. In addition, the Foundation pays for authorized medical and surgical services provided by physicians in private practice, in-hospital drugs, and certain out-patient drugs used in the active treatment of cancer.

Eligible patients who elect to receive their cancer services outside the province are reimbursed at the same rates as if the service was provided in Saskatchewan. If a patient is referred out of the province by the Foundation for treatment not available in Saskatchewan, payment will be made for the medical and hospital expenses incurred. Non-residents who receive cancer services in Saskatchewan are charged at Saskatchewan rates for services rendered.

ORGANIZATION

Nature and Scope of Services

The program offered by the Saskatchewan Cancer Foundation incorporates prevention, detection, diagnosis, treatment and follow-up of patients with malignant or premalignant disease. As a part of this comprehensive program, the Foundation is involved in teaching and research which is complementary to the service activities.

Since only patients referred by doctors are admitted to the Cancer Control Program, the responsibility for suspecting cancer and facilitating its detection at the earliest possible time rests with the family doctor. When the family physician suspects the presence of cancer, and has completed his investigations, a diagnosis should be arrived at and an evaluation made as to the extent of the disease and the treatment required as soon as possible. To facilitate this process, the patient should be referred to the cancer clinic or appropriate specialists, whichever is most suitable. In all cases, the patient must be registered with the program within 14 days of making the diagnosis of cancer.

When a malignant condition is discovered, the clinic medical staff, the patient's physician, and consultant specialists plan and carry out a treatment program. If surgery forms part of the treatment, the patient and his physician may choose an appropriate qualified surgeon from a surgical roster maintained by the Foundation. If radiotherapy forms part of the treatment plan, it is administered by therapeutic radiologists on the staff of the clinics. Chemotherapy, the treatment of cancer through the administration of chemical agents, is carried out by clinic medical staff and by other physicians in consultation with clinic staff.

Regular follow-up examination of patients treated for cancer is a vital procedure in detecting recurrent disease and for assessing the effectiveness of treatments. The Saskatchewan Cancer Foundation maintains a comprehensive follow-up activity with all patients receiving regularly scheduled examinations after treatment by either personnel of the clinics, consultant specialists or their family physician.

The staff of each clinic, in co-operation with the patient's family physician and consultant specialists, attempt during treatment and follow-up to prepare the patient both physically and psychologically for the future. Those who must be fitted with prosthetics are given instructions on how to adapt to them, while patients with certain disabilities are cared for at the Wascana Hospital in Regina or the rehabilitation unit of the University Hospital in Saskatoon. Patients and their families often go through successive periods of stress and readjustment when faced with problems created by a diagnosis of cancer. Medical Social Workers at each clinic are available to meet the social and emotional needs of the cancer patients and their families.

REPORTS

EXECUTIVE DIRECTOR

I am pleased to submit this report highlighting the activities of the Saskatchewan Cancer Foundation for the year 1985-86.

The past year saw the completion and official opening of the Canadian Cancer Society Patient Lodge in Regina which is the province's second cancer patient lodge. The construction of this lodge, similar to the Saskatoon facility, was funded through the generosity of the Canadian Cancer Society, Saskatchewan Division.

The need for a new cancer clinic in Saskatoon has been part of the cancer program's focus since the Foundation was established in 1979. The realization of such a facility was marked by the official sod turning ceremony on March 10, 1986. The $13 million building contract was awarded to PCL-Maxam, A Joint Venture of Saskatoon. We expect the new building to be ready for occupancy in the fall of 1987.

The Patient Registry and its associated systems were converted from the provincial government's computer utility (Sask Comp) to the Foundation's computer in mid June. This conversion allowed us to enhance and improve the system's efficiency. However, with the increased sophistication, the system was unable to operate effectively on equipment shared with Physics Services. Thus, a larger computer was installed in February, 1986 to assume the registry and potential administrative systems.

It was with regret that I received Sylvia Fedoruk's notice of resignation as Director of Physics Services effective December 31, 1986. In response to the resignation, an extensive review of Physics Services took place and a new organization was agreed upon to take effect on January 1, 1987. The new organization will see the rescission of the provincial Director and the assignment of the responsibility for Physics Services to the Chief Medical Physicist within each clinic.

We continue to be grateful to the Government of Saskatchewan for the provision of funds for research. This is an important part of a modern cancer clinic and reflects positively on the province's cancer program from both a national and international perspective. A number of projects, funded through grants approved by the Foundation's Research Fund, have received broader recognition. For example, funding provided to Dr. R. Hickie over the past four years was the catalyst for his obtaining a two-year grant from the National Cancer Institute of Canada allowing continuance of his work. Our participation in the North Central Cancer Treatment Group continues to receive 50% of its funding from the N.C.I. (U.S.A.). The Saskatchewan Lung Cancer and Farming Collaborative Study (Klaassen/Dosman) provided the basis for a number of manuscripts and presentations including acceptance for presentation at the 14th International Cancer Congress in Budapest, Hungary in August, 1986. Dr. D. Hogan received the Barney Usher Award for excellence in dermatologic research for his project Skin Cancer in Saskatchewan. Dr. R. Mackie was honoured by the American Association of Physicists in Medicine for the best article published in 1985 and with his co-authors received the Farrington Daniels Award. This report also lists the many papers which have been accepted for publication. This is a measure of the Foundation's success in research and we are pleased with our staff's involvement in this aspect.

Once again, I would like to thank the staff and volunteers for their dedication to their work during the past year. The things achieved were the result of their involvement in the many, many tasks associated with providing a quality service. To the Chairman and Board of Directors, I extend my appreciation for their guidance and encouragement given during the year.

P. H. Peters

REPORTS

MEDICAL DIRECTOR

1985-86 was a year of stability and growth for the medical activities of the cancer program. The staff of both clinics continue to be very busy with patient care, research and teaching as documented in each clinic report. The following are a few of the highlights of the Foundation's medical activities.

The Medical Advisory Committee ratified the report of the Foundation's committee on education which recommended that the Saskatchewan Cancer Foundation provide a grant to support the cancer related educational activities of the Divisions of Continuing Medical and Nursing Education.

The Foundation's Physicians Planning Group, consisting of the Directors and Medical Department Heads of both clinics, meet to review the medical activities of the Foundation and set goals for the future. An important activity of this group during the coming year will be the development of a new five year plan for medical services.

The Annual Professional Staff Retreat for Physicians and Physicists was held in November, 1985, in Saskatoon. Dr. Hugh McKee, Physician Co-ordinator for the Saskatoon Home Care Palliative Care Program, presented an excellent talk on Palliative Care, as did Miss S. O. Fedoruk, Director of Physics for the Program, on the history of radiotherapy in Saskatchewan. Dr. A. Baillie of the Saskatoon Clinic presented some stimulating thoughts on treatment planning and nuclear imaging.

Two special conferences were held for consultants and Cancer Foundation staff during the year. One day conferences on the Management of Urological Cancer and on the Management of Thyroid Cancer were held with invited outside speakers. Both of these conferences were set up with the active participation of the appropriate consultants in Saskatoon and with the support and help of Continuing Medical Education. These conferences were funded primarily by the Cancer Foundation with support from the Canadian Cancer Society.

The Cancer Foundation is slowly making progress in obtaining a defined in-patient oncology unit within each of the parent hospitals. Access to beds continues to be a source of frustration, particularly for the Saskatoon Cancer Clinic staff.

The staff of the clinics appreciate the excellent support that is provided by the Executive Director and his staff as well as the support and encouragement of the Foundation Board. It is gratifying to see progress in the cancer program's mandate to provide quality patient care, research opportunities and educational activities.

D. J. Klaassen

REPORTS

PHYSICS SERVICES

Physics Services supports radiation oncology in the clinics through the continued maintenance of radiation dosimetry; collaboration in treatment planning and in verification of the accurate execution of the plans; responsibility for all physical aspects of radiation protection; design and maintenance of radiation oncology equipment; and advice on new radiation oncology equipment and on the physical aspects of the design of buildings.

Physics Services continues full maintenance support for major radiation oncology treatment equipment. Current radiation oncology treatment equipment in the Allan Blair Memorial Clinic consists of a dual purpose x-ray unit, a Picker C9 Cobalt Unit, a Siemens 4 MeV Linear Accelerator, a Siemens 20 MeV Linear Accelerator and a Siemens Simulator. The Saskatoon Cancer Clinic has a dual purpose x-ray unit, a 120 kVp x-ray unit, an A.E.C.L. Theratron 80 Cobalt Unit, a Siemens 6 MeV Linear Accelerator, a Siemens 42 MeV Betatron, and an A.E.C.L. Simulator.

During the year, Physics Services participated in the Technical Advisory Group (TAG) formed to evaluate the Foundation's computer requirements.

Physicists in both clinics are involved with the Departments of Nuclear Medicine of the Pasqua, Plains, Regina General and University Hospitals. In Regina, physics personnel were involved in planning a major expansion of Nuclear Medicine resources at the Plains Health Centre, including the purchase of two new computers and a new tomographic gamma camera. At the Pasqua Hospital, the Nuclear Medicine Department moved to new facilities as a part of the hospital's regeneration program. Physics Services assisted with the relocation and reorganization of instrumentation and provided advice on the purchase of a mobile gamma camera with on-board computer.

Dr. Ron Sloboda of the Allan Blair Memorial Clinic co-ordinated the annual meeting of the Prairie Provinces Chapter, Society of Nuclear Medicine, held in Regina in April.

In Saskatoon, Physics personnel continued to perform total "in-house" maintenance of Nuclear Medicine equipment, assisted in planning a new Nuclear Medicine Department and participated in selection of new whole body/ECT cameras.

All four Regina physicists and one Saskatoon physicist were accredited as members of the Canadian College of Physicists in Medicine. Dr. Ron Sloboda of the Allan Blair Memorial Clinic was made a Fellow of the College.

Research projects of last year have continued. It is to be noted that Dr. Rock Mackie collaborated with Dr. Dave Rogers and Dr. Alex Bielajew at the National Research Council of Canada in Ottawa and with Dr. Jerry Battista at the Cross Cancer Institute in Edmonton, on the calculation of dose spread arrays using Monte Carlo techniques. In recognition of his leadership in the field, Dr. Mackie was invited to write a chapter for Volume III of "Dosimetry of Ionizing Radiation", to be entitled "Applications of the Monte Carlo Method in Radiotherapy".

S. O. Fedoruk

REPORTS

DATA SERVICES

Data Services supports and maintains the Cancer Registry and its associated functions within the Health Records departments of both clinics.

In June of 1985 the on-line Cancer Registry System and Patient Appointment Systems were implemented in both clinics. As a result of these systems, patient information is accumulated and the patient's computer record is immediately updated from the time of registration to the time of assignment of the next appointment or follow-up, via computer terminals and screens. Terminals are used in the records office for patient identification and in admitting and reception to register the patient and to assign appointment times. The major use of the Registry System is within the Statistics Department where all information concerning the final diagnosis, treatment, and follow-up of cancer cases is collected.

The new system has increased the efficiency of data entry to the registry by allowing for the on-line correction of errors, by providing the ability to 'view' what is on the file, and by eliminating duplication of key data elements. This on-line capability is a tremendous improvement over the previous batch system.

Throughout the year there was a moderate decline in the number of information requests serviced from the previous year. The decline was predominantly caused by the large efforts extended by the Computer Services staff on the implementation of the new on-line systems. However, there were 72 requests done, with some of the more major ones being requests to facilitate research projects supported by the Saskatchewan Cancer Foundation Research Committee, i.e., Skin Cancer in Saskatchewan, and requests for demographic incidence.

In 1985, 5,382 new cancer cases were diagnosed in Saskatchewan. The summary of these cases and incidence rates per 100,000 population can be seen on pages 24 and 25 of this report. Throughout the province there are approximately 31,090 active cases. Of these cases, 6,390 are on follow-up at the clinics while 23,354 are on a follow-by-mail review usually through their physician. The remaining 1,346 cases are newly diagnosed and not yet assigned to a follow-up program. During 1985, due to the large volumes of follow-by-mail reviews, it was decided to follow skin cancer cases for a period of 3 years only providing they had remained disease free. This resulted in a reduction of approximately 9,000 skin cases from our follow-up program.

During the next year, no major changes are planned for either the Registry or Appointment Systems. It is anticipated that as a result of the capabilities of the on-line system, there will be an increased demand for information and the focus of attention will shift to finding improved methods to satisfy such requests.

D. L. Robson

ALLAN BLAIR MEMORIAL CLINIC

ALLAN BLAIR MEMORIAL CLINIC

The most important event in the year was the opening of the Regina Cancer Patient Lodge on July 12, 1985. This Lodge, built and furnished by the Saskatchewan Division of the Canadian Cancer Society, will be operated by the Saskatchewan Cancer Foundation as a department of the Allan Blair Memorial Clinic.

The Departments of both Radiation and Medical Oncology continue to actively participate in clinical research through the North Central Cancer Treatment Group with the Mayo Clinic in Rochester. The clinic has commenced protocol activities with the Children's Cancer Study Group which is also based out of the Mayo Clinic.

The Department of Radiation Oncology provides radiation treatment using x-rays and gamma rays in the diagnosis and treatment of malignant diseases. During 1985, the clinic provided radiotherapy to approximately 1,400 patients. These treatments were predominantly given using the linear accelerator. The department is in the process of phasing out the Cobalt 60 unit and replacing it with a Siemens 4 MeV linear accelerator.

The staffing situation in the department has stabilized with the hiring of Dr. M. S. Khan, as a Radiation Oncologist, and two graduates from our Radiotherapy Technologist Training Program.

In the past year, Physics Services has continued its clinical support to the Department of Radiation Oncology. The construction of a new 4 MeV linear accelerator bunker was completed, and a Siemens linear accelerator was installed and put into clinical use.

Physics Services has also provided technical assistance to the Department of Computer Services in the selection of a VAX 11/785 computer for use by the Patient Registry. The construction of a new computer room was completed, and both the physics VAX 11/750 and the Foundation Administration VAX 11/785 are now housed in that location.

Research in Physics Services has continued in the areas of electronics and computer applications in radiotherapy, as well as in the new algorithms for treatment planning.

In Health Records, the on-line Patient Registry and Appointment System became operational in 1985 with computer terminals being placed in all areas of the department, nursing stations and business office. The system has streamlined procedures for admitting patients, booking appointments, following patients by mail and providing statistics.

As a part of the training program for Health Record Technologists, students from the Wascana Institute of Applied Arts and Sciences interned on rotations of 8 weeks and 2 weeks, respectively. This is an ongoing teaching program within the clinic.

In conjunction with the opening of the patient lodge, the Department of Social Services began handling admissions to the lodge, arranging volunteer activities within the lodge, and providing transportation for lodge patients.

Other areas of service that have expanded are Palliative Care Planning, with the Social Services Department being involved in co-ordination and planning with other agencies and institutions in the community, and the Bereavement Follow-up program.

During this year, a second Personal Services Worker was added to the department's staff and acknowledgment is made to the Canadian Cancer Society for the provision of their grant which helps fund these two positions.

ALLAN BLAIR MEMORIAL CLINIC

Allan Blair Memorial Clinic Staff

Administration

Dr. H. G. Whiston
— *Director*
B. I. Karchewski
— *Director's Secretary*
J. A. Grill
— *Business Manager*
A. M. Sweet
— *Assistant to Business Manager*
J. J. Sigurdson
— *Business Manager's Secretary*

Medical

H. G. Whiston, M.B., Ch.B., D.M.R.T., F.R.C.P.(C)
W. A. Bethune, M.B., B.S., D.A.B.R.
G. H. Ewing, M.B., Ch.B., M.R.C.P.(Ed.), F.R.C.P. (C)
T. S. Goh, M.B., B.S., F.R.C.P.(C)
M. S. Khan, M.B., B.S., D.M.R.T., F.F.R.
P. W. Kuan, M.B., D.M.R.T.(T), F.R.C.P.(C)
S. K. Liem, M.D., D.A.B.R., F.R.C.P.(C)
M. A. Poon, M.B., F.R.C.P.(C)
S. Rayson, M.B., B.S., F.R.C.P.(C)
L. J. Rodrigue, M.D., F.R.C.S.(C), D.A.B.S.

Consultants

Pathology
D. Dexter, M.R.C. Path., F.R.C.P.(C)
J. M. Vetters, M.D., F.R.C.P.(C), F.R.C. Path

Physicists

P. A. Dickof, M.Sc., M.C.C.P.M.
— *Chief Medical Physicist*
T. R. Mackie, Ph.D., M.C.C.P.M.
M. G. Schmid, B. Sc., M.Sc., M.C.C.P.M.
R. S. Sloboda, B.Sc., Ph.D., F.C.C.P.M.

ALLAN BLAIR MEMORIAL CLINIC

Nurses
V. Curtis — Head Nurse
J. Bartel
M. Gautama
G. Lefebvre
S. McNea
F. Moore
B. Priebe
G. Burk, S. Fraser — Part Time

C.N.A.'s and Nurses Aides
V. Blake
D. Cochrane
L. Dobson
R. Gaube
J. Lamotte
I. Streete
H. Yaworski

Porter Attendant
H. Goertz

Director of Health Records
K. Hack

Statistics
A. Watson
M. Haubrich
E. Hubick
L. Kardynal
D. Kingston
G. Korol
T. Parker
D. South
M. Johnson — Part Time

Records
B. Bryksa
A. Nimetz
R. Schondelmier
S. Monson, L. Skrtic — Part Time

Medical Typists
C. Bagu
D. Dunham
H. Lavoy
B. Nordal
S. Rabak
C. Stenzel

Reception and Admitting
P. Clow
D. Tendler

Social Worker
B. Uncles

Personal Services Workers
B. Butcher
J. Neddow

Physics Support Staff
I. Hardie
J. Hughes
C. Ladyka
J. Lawrence
W. MacDonald

Radiotherapy Technologists
M. Rice — Chief Technologist
J. Dufay
B. Foote
D. Irwin
N. Makhani
T. Mitchell
R. Moore
E. Schmid
M. White

Radiotherapy Technologist Students
C. Ackerman
J. Dornan

Simulator Technician
L. Goalen — Part Time

Research Assistants
R. Andrews
E. Dietrich
R. Morris
A. Winnicki

Patient Lodge
S. Murray — Lodge Manager
C. Doyle
E. Francis
C. Hrynyk
E. Kuzminski
M. Fries, I. Holbrow, M. Horning — Part Time

THE REGINA CANCER PATIENT LODGE

On July 12, 1985, the second Saskatchewan patient lodge was officially opened by the Saskatchewan Division of the Canadian Cancer Society. Located across from the Allan Blair Memorial Clinic (Pasqua Hospital) at 4104 Dewdney Avenue, the Lodge provides free accommodation for out-of-town ambulatory patients receiving treatment at the clinic.

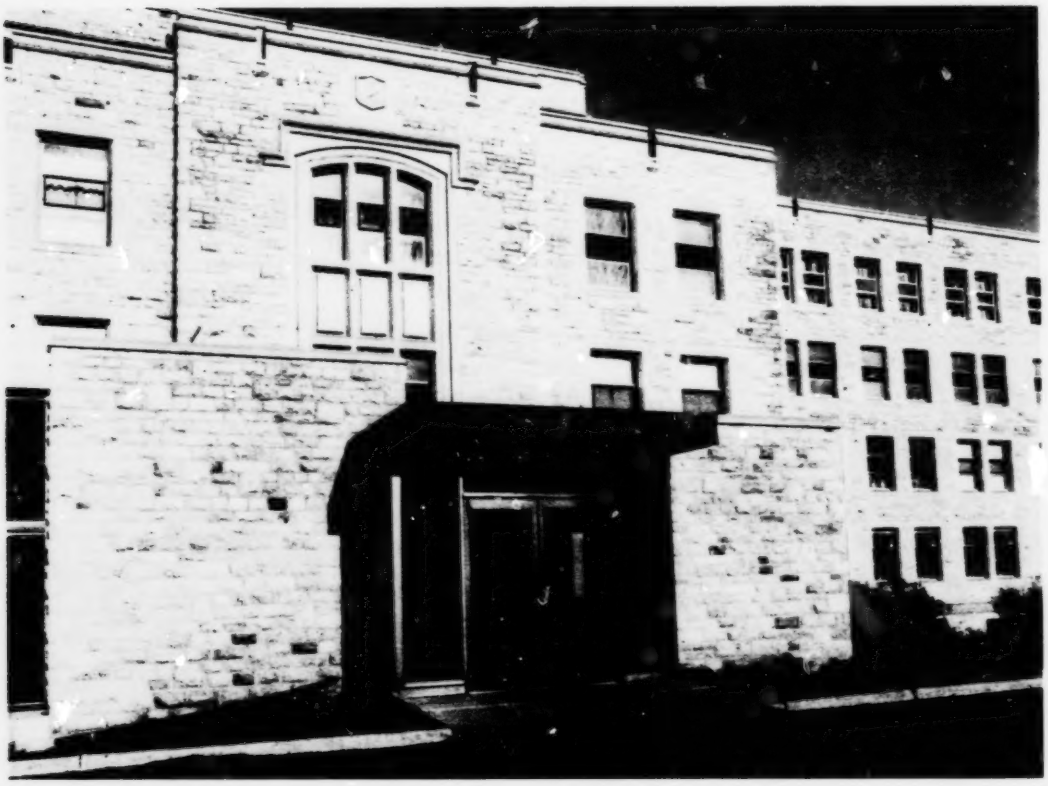
The Cancer Patient Lodge is operated by the Saskatchewan Cancer Foundation as a department of the Allan Blair Memorial Clinic. It is staffed with a Lodge Manager, a full-time cook, three full-time homemakers and three part-time homemakers.

The Cancer Patient Lodge can accommodate as many as 28 people in 10 double and 8 single rooms. Patients stay free, while family members can stay with them in the Lodge for a nominal fee.

Since the first patient was admitted on June 17, 1985, 234 patients and 69 companions have stayed at the Lodge.

Policies governing admission to the Lodge are outlined on Page 46.

SASKATOON CANCER CLINIC



SASKATOON CANCER CLINIC

The Sod Turning Ceremony on March 10, 1986 marked the beginning of construction of a new $16.4 million cancer treatment and research facility in Saskatoon. The design and planning put into this new facility will make it one of the most modern in Canada when it opens in the fall of 1987. Although this planning involved many hours of staff participation, normal clinic activity prevailed.

The Department of Medical Oncology remains very active in its participation in clinical trials as part of the North Central Cancer Treatment Group and the National Cancer Institute of Canada Clinical Trials Group.

In addition to their participation in co-operative groups, several clinic doctors continued individual involvement in research trials and projects. Dr. Maksymiuk maintained his in-house protocol for arterial infusion chemotherapy in liver cancer developed and initiated at the University Hospital in Saskatoon. Dr. Klaassen, in collaboration with Drs. McDuffie and Dosman of the Pulmonary Medicine Section of the Department of Medicine is carrying out a study on the epidemiological aspects of lung cancer in Saskatchewan farmers. Dr. Little continued his participation with Schering Pharmaceutical Company in the use of Leuprolide and Flutamide in advanced prostate cancer.

Drs. Little and Maksymiuk were awarded the Certificate of Special Competence in Medical Oncology by the Royal College of Physicians and Surgeons of Canada.

The clinic, in collaboration with the Departments of Medicine, Surgery, and Continuing Medical Education of the College of Medicine, sponsored two symposia, one on urological cancer in June and one on thyroid cancer in February, 1986.

Dr. H. Krespin has joined the Department of Pediatric Oncology as a part-time consultant providing invaluable assistance and expertise. The department's involvement in the Children's Cancer Study Group has remained at a high level with this important program producing major improvement in the care provided to the children.

The Department of Radiation Oncology treated approximately 1,000 patients during 1985. The majority of these treatments were done using the linear accelerator and the cobalt unit. The department's continued involvement with co-operative group studies, in particular, the Radiation Therapy Oncology Group, is an important activity of the radiation oncologists within this clinic.

Physics Services, through the Technical Advisory Group (TAG), supported the Foundation in its evaluation of computer hardware. As a result of the adoption of the recommendations of this group, the Registry System was moved to a VAX 11/785 computer which freed the existing VAX 11/750 computer primarily for Physics Services.

Due to the forthcoming retirement of the Director of Physics Services, considerable planning for the restructuring of Physics Services took place and the new organization was ready to implement at year's end.

The nursing staff, in addition to their patient service duties, support the Department of Continuing Nursing Education through their participation in educational workshops. These workshops add to their education and keep the nursing staff up-to-date on the rapidly changing technology in medical oncology and research.

The major change within the Health Records Department was the conversion from a batch system to an on-line system of computerized data management. This new system has given most of the departments (nursing, admitting, reception, statistics) access to the entire provincial registry file for inquiry and updating.

SASKATOON CANCER CLINIC

The Patient Lodge continues to have a high occupancy rate. In the 246 available days of lodge operation from April 1, 1985 to March 31, 1986, there was a total of 4,444 days of lodge usage involving 3,882 patient stays and 562 stays by companions. The reciprocal volunteering between the Cancer Society and Lodge residents has been mutually satisfying. This year, the Society provided an evening a week of entertainment for lodge residents. The variety and diversion are enthusiastically received and greatly appreciated.

Social Services has been the liaison for the Palliative Care Project of the Saskatoon Home Care District #45 and the Saskatoon Cancer Clinic. Over 200 clients have received palliative care services over the past two years. The Medical Social Worker participated in an extensive evaluation study of the Palliative Care Project and continues to attend Weekly Admissions Committee Meetings. Besides individual and family counselling, the Social Worker has supervised the practicum placement of one student from the School of Social Work as well as the Practicum II Feasibility Project designed to determine the value of group support for families of University Hospital ward patients. Public and professional education has also been a part of the Social Worker's activities.

Two Personal Services Workers, whose salaries are paid through a grant from the Canadian Cancer Society, Saskatchewan Division, provide practical and emotional support to patients attending the clinic. They offer assistance in obtaining transportation, accommodations, wigs, dressings and equipment for better home management. In addition, they also co-ordinate bookings to the Cancer Patient Lodge and supervise clinic volunteers whose invaluable services include transporting patients to test centres, serving refreshments and providing non-professional support.

SASKATOON CANCER CLINIC

Saskatoon Cancer Clinic Staff

Administration

Dr. D. J. Klaassen
— Director
A. D. Oatway
— Director's Secretary
O. Belovanoff
— Business Manager
M. M. Wood
— Assistant to Business Manager

Medical

D. J. Klaassen, B.A., M.D., F.R.C.P.(C)
C. T. Ago, M.B., Ch. B., D.M.R.T., F.R.C.R., F.R.C.P.(C)
G. R. Armitage, M.D., F.R.C.P.(C)
M. L. Davis, M.D.
P. K. Joseph, M.B.B.S., D.A.B.R.
C. D. Little, M.D., F.R.C.P.(C)
I. M. MacLennan, M.B., Ch.B., D.A.B.R.(T)
D. G. McGowan, M.B., Ch.B., D.M.R.T., F.R.C.P.(C)
J. B. McSheffrey, B.A., M.D., F.R.C.P.(C)
A. W. Maksymiuk, M.D., F.R.C.P.(C)
M. F. Mohamed, M.B.B.S., D.M.R.T., F.R.C.R.
A. Naidoo, M.B., Ch.B.

Part Time

R. T. Card, M.D., F.R.C.P.(C)
H. I. Krespin, M.D., F.R.C.P.(C)
S. Padmanabh, M.B.B.S., D.C.P., F.R.C.P.(Ed), F.R.C.P.(C)
D. R. Popkin, B.Sc., M.D., C.M., F.R.C.S.(C), F.A.C.O.G.
L. F. Skinnider, M.B., F.R.C.P.(C)

Consultants

Pathology

H. J. Block, F.R.C.P.(C)
H. E. Emson, F.R.C.P.(C)

Diagnostic Radiology

G. Bray, D.M.R.D., F.R.C.P.(C)
C. S. Houston, M.D., F.R.C.P.(C), F.A.C.R.
J. G. Monks, F.C.C.P., B.A.O., D.M.R.D., F.R.C.P.(C)

Physicists

W. B. Reid, B.A., M.A., Ph.D., F.C.C.P.M.
— Chief Medical Physicist
A. D. Baillie, B.Sc., Ph.D., F.C.C.P.M.
R. H. Hummel, B.Sc.(EE), M.Sc., Ph.D., M.C.C.P.M.

SASKATOON CANCER CLINIC

Nurses
- S. Cianflone — Head Nurse
- E. Farkas
- M. Grant
- D. Shurvell
- V. Stacey
- L. Wilson
- C. Bichon, H. Borden, D. Hickie — Part Time

C.N.A.'s
- E. Friesen
- M. Orr
- N. Pasloski
- D. Tatarynovich

Porter
- R. Pryor
- R. Giesbrecht — Part Time

Director of Health Records
- V. Runquist

Statistics
- M. Blatz
- D. Burnett
- G. Hartz
- R. McKillican
- M. Popplewell
- L. Uchacz
- C. Wilson
- F. Lowe — Part Time

Records
- L. Fleming
- J. Frechette
- B. Heinrichs
- L. Miller
- C. Wiebe

Reception and Admitting
- D. Dyal
- S. Estey
- Y. Leibel

Medical Typists
- A. Greva
- S. Boulin
- D. Clark
- M. Emigh
- V. Langlois
- D. Leciuk
- D. Zacharias

Physics Support Staff
- R. Berthiaume
- K. Damm
- J. McConnell
- S. Meeklah
- R. Penley

Physics Secretary
- B. Piercy

Radiotherapy Technologists
- H. Walker — Chief Technologist
- T. Cisecki
- S. Coulter
- P. Gesiorowski
- M. Gibb
- E. Goretzky
- M. Greuel
- K. Jones
- K. McDuffe
- J. Rudolph
- K. Stewart
- N. Carlsen, D. Rapp — Part Time

Radiotherapy Technologist Students
- N. Denis
- I. Hudson
- J. Rottenbucher
- L. Shirley

Social Worker
- E. Skinner

Personal Services Workers
- C. Deering
- B. Morrall

Simulator Technician
- D. Paisley — Part Time

Dietician
- J. Gravel — Part Time

Research Assistant
- D. Dupuis

Patient Lodge
- M. Kucey — Lodge Manager
- B. Gregory
- L. Mulligan
- M. Strohan
- A. Urscheler
- V. From, L. Hodgins, M. Letkeman, G. Ruder — Part Time

STATISTICAL TABLES

New Cancers by Site, Sex and Age Group — 1985

SITE	Sex	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
Lip	M								1	2	1	4	9	10	14	13	14	5	10	83
	F									1			1			2	3	3	2	12
Oral Cavity	M					1			1	2	2	4	2	3	5	3	2		1	26
	F				1				2		1		2	3		4	3	1	1	18
Pharynx and	M		1									1		2	1		2		1	8
Nasopharynx	F													1	2					3
Oesophagus	M									1	1	1	2	6	5	4	3		1	24
	F											1	2	1	1	2	2			9
Stomach	M										2	3	5	8	13	17	19	8	9	84
	F										1	1		6	4	6	8	10	7	43
Small Intestine	M											1	1	2						4
	F										1	1				2	2		1	7
Colon	M							1	1	2	5	5	15	16	27	26	27	15	13	153
	F								2	2	5	7	12	14	22	29	23	18	21	155
Rectum	M									2	1	8	16	21	22	24	13	14	10	131
	F								3	1	3	3	4	7	14	15	10	6	6	72
Liver, Gall Bladder,	M								1		1		4	4		3	6	1	1	21
Bile Ducts	F	1										1	2		3	2	4	2	1	16
Pancreas	M											1	4	5	9	10	10	3		42
	F									2		2	3	5	5	3	11	8	3	42
Larynx	M									1		1	5	4	6	8	1	1		27
	F										1			2			1			4
Lung	M									5	5	26	43	40	66	72	43	19	12	331
	F								3	2	10	11	27	26	11	16	14	4	3	127
Breast	M															1				1
	F						2	12	20	27	31	29	35	61	56	62	37	26	29	427
Prostate	M						1				1	2	23	44	63	90	104	70	44	442
	F																			
Testis	M				2	4	2	6	3		2	1	2	1						23
	F																			
Other Male Organs	M					1							1		1		1			4
	F																			
Cervix (Invasive)	M																			
	F						5	10	5	5	4	2	2	4	4	1	4	1	1	48
Cervix (In-situ)	M																			
	F					4	19	19	11	9	4	4	2	3	1	2				78
Uterus	M																			
	F					1	1		1		7	7	4	12	23	15	7	8	2	88
Ovary	M																			
	F				1	1	4		5	1	4	5	13	6	10	11	7	4	1	73
Other Female Organs	M																			
	F														4	2	4	3	5	18
Other Urinary Organs	M								1	1	2	6	5	10	12	5	3	3	3	51
	F	3				1						1	4	5	5	6	3	1	2	31
Urinary Bladder	M							2	1	1	1	3	8	15	20	27	21	12	15	126
	F								1			3	1	3	3	6	9	5	3	34
Malignant Melanoma	M				1		1	4	1	5	1	2	1	4	2	5		1	0	28
(Skin)	F				1	1	1	2	2	5		6	6	2	5	3	3		4	41
Skin	M					7	11	12	19	19	25	37	60	120	151	153	145	117	85	961
	F						3	14	19	13	14	25	56	70	79	94	81	88	110	666
Brain and	M	4	2		1	1	2	1	1			2	5	2	2	7	1			31
Nervous System	F		2	1			1	2	1	2	2	1		4	3	8	2	2	1	32
Thyroid	M						1				1	1	2	2	1			1	1	10
	F					2	5	2	2	2	2	2	2	3	2	1	1		2	28
Bone and	M				1		1			1							1		1	5
Cartilage	F				1								1	1	1					4
Soft Tissue	M	1	2		1	1					1	1		1	2	3	4		1	18
	F	1		1		1					1	1	2	1	2			2		12
Hodgkin's Disease	M					4	1	3	3	1	1	1	1	2		4		1		22
	F				2	1	3		3	3		1	1		1	1				16
Lymphoid Tissue	M			1			2	2	3	3	2	4	5	7	8	13	8	7	5	68
	F									1	3	7	7	3	8	8	5	6	3	51
Leukemia	M	2	4	3				3	1	1	4	1	4	5	12	10	13	4	6	73
	F	5	1		1		1	1	1			1	7	4	3	6	4	2	3	40
Multiple Myeloma	M											2	3	3	4	4	2	1	1	20
	F												3	2	2	7	3	1		18
Miscellaneous	M			2		1		2	1	1	3	1	3	4	5	2	5	1	1	32
	F					1	1	1		1	1	3	1	2	4		2	1	1	19
Primary Unknown	M					1					1	1	4	2	5	6	3		1	24
	F											2		5	7	4	5	1	2	26
Secondary	M											3	3	2	1	4	6		3	22
	F								1			2	3	3	2	3	6	2	7	29
In-Situ	M							2	2	4	4	1	10	9	15	18	18	15	14	110
	F						3	2	2	5	7	4	5	9	13	7	15	7	11	90
Total — All Sites	M	7	9	6	6	21	22	38	40	52	67	124	248	354	472	532	471	299	239	3,005
	F	10	3	2	7	13	49	65	84	82	102	133	208	268	300	328	279	212	232	2,377
Total		17	12	8	13	34	71	103	124	134	169	257	454	622	772	860	750	511	471	5,382

STATISTICAL TABLES

Incidence of Cancer Per 100,000 Population — 1985

Site	Total Population (1) 1985		Population at Risk (2) 1985	
	Male	Female	Male	Female
Lip	15.9	2.3	39.7	5.5
Oral Cavity	5.0	3.5	12.4	8.2
Pharynx and Nasopharynx	1.5	0.6	3.8	1.4
Oesophagus	4.6	1.7	11.5	4.1
Stomach	16.1	8.3	40.2	19.7
Small Intestine	0.8	1.4	1.9	3.2
Colon	29.3	30.0	73.3	71.0
Rectum	25.1	13.9	62.7	33.0
Liver, Gall Bladder, Bile Ducts	4.0	3.1	10.1	7.3
Pancreas	8.0	8.1	20.1	19.2
Larynx	5.2	0.8	12.9	1.8
Lung	63.4	24.6	158.5	58.2
Breast	0.2	82.6	0.5	195.5
Prostate	84.6	0.0	211.6	0.0
Testis*	4.4	0.0	5.8	0.0
Other Male Organs	0.8	0.0	1.9	0.0
Cervix (Invasive)†	0.0	9.3	0.0	13.6
Cervix (In-Situ)†	0.0	15.1	0.0	22.0
Uterus	0.0	17.0	0.0	40.3
Ovary	0.0	14.1	0.0	33.4
Other Female Organs	0.0	3.5	0.0	8.2
Other Urinary Organs	9.8	6.0	24.4	14.2
Urinary Bladder	24.1	6.6	60.3	15.6
Malignant Melanoma (Skin)	5.4	7.9	13.4	18.8
Skin	184.0	128.8	460.2	305.0
Brain and Nervous System	5.9	6.2	14.8	14.7
Thyroid	1.9	5.4	4.8	12.8
Bone and Cartilage	1.0	0.8	2.4	1.8
Soft Tissue	3.4	2.3	8.6	5.5
Hodgkin's Disease*	4.2	3.1	5.6	4.1
Lymphoid Tissue	13.0	9.9	32.6	23.4
Leukemia	14.0	7.7	35.0	18.3
Multiple Myeloma	3.8	3.5	9.6	8.2
Miscellaneous	6.1	3.7	15.3	8.7
Primary Unknown	4.6	5.0	11.5	11.9
Secondary Site	4.2	5.6	10.5	13.3
In-situ Cancers	21.1	17.4	52.7	41.2
Total — All Sites	575.4	459.8	1,438.9	1,088.5
Total — All Sites — Both Sexes	517.9		1,259.8	

STATISTICAL TABLES

Number of New Cases Admitted and Patient Examinations by Patient Type and Clinic 1984 and 1985

	Allan Blair Memorial Clinic Regina		Saskatoon Cancer Clinic		Total Both Clinics	
Patient Type	**1984**	**1985**	**1984**	**1985**	**1984**	**1985**
New Cases						
Malignant	2,498	2,654	2,348	2,840	4,846	5,494
Benign	265	308	123	125	388	433
Still Under Investigation	75	0	213	28	288	28
Total	2,838	2,962	2,684	2,993	5,522	5,955
Cases Reviewed						
Follow Up at Clinic	11,485	13,165	9,660	12,160	21,145	25,325
Follow Up Elsewhere	16,768	17,218	17,828	19,210	34,596	36,428
Total	28,253	30,383	27,488	31,370	55,741	61,753
Grand Total	31,091	33,345	30,172	34,363	61,263	67,708

An analysis of the distribution of new cancers diagnosed in 1985 by cancer site, sex, and age group is included on page 24 of this report. These distributions do not include neoplasms of uncertain behavior which are counted as benign in the above table.

Number of Patients Treated by Radiation 1984 and 1985

	Allan Blair Memorial Clinic Regina		Saskatoon Cancer Clinic		Total Both Clinics	
Type of Radiation Treatment	**1984**	**1985**	**1984**	**1985**	**1984**	**1985**
Betatron			273	136	273	136
Linear Accelerator	623	431		276	623	707
Cobalt	679	503	618	494	1,297	997
X-ray	122	125	94	59	216	184
Interstitial and Intracavitary	25	27	32	25	57	52
Gold Grains	1	3		—	1	3
Beta-ray	29	—	2	—	31	—
Other (P32, I131)	3	3	27	28	30	31
Total	1,482	1,092	1,046	1,018	2,528	2,110

FINANCIAL STATEMENTS

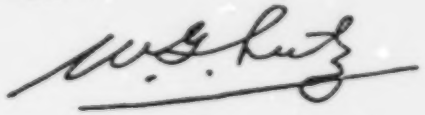
Year Ended March 31, 1986

AUDITOR'S REPORT

To the Members of the Legislative Assembly
Province of Saskatchewan

I have examined the balance sheet of the Saskatchewan Cancer Foundation as at March 31, 1986 and the statements of revenue and expenditure and fund balance for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Saskatchewan Cancer Foundation as at March 31, 1986 and the results of its operations and changes in financial position for the year then ended in accordance with the disclosed basis of accounting applied on a basis consistent with that of the preceding year.



Regina, Saskatchewan,
July 25, 1986.

W. G. Lutz, F.C.A.,
Provincial Auditor.

FINANCIAL STATEMENTS

Year Ended March 31, 1986

Statement 1

SASKATCHEWAN CANCER FOUNDATION
BALANCE SHEET

As at March 31

	1986						1985
	General Fund	Major Equipment Grant Fund	Saskatoon Clinic Construction Fund	Research Fund	Trust Fund	Total	Total
Assets							
Current:							
Cash and short-term investments	$ 2,480,458	$ –	$ –	$ 421,945	$ 754,940	$ 3,657,343	$ 3,612,105
Accounts receivable:							
– Department of Health	896,028	–	–	–	–	896,028	81,347
– Other and accrued interest	94,252	–	–	12,359	22,657	129,268	85,174
Prepaid expenses	27,900	–	–	10,896	–	38,796	22,700
Due from (to) other funds	(1,501,040)	364,362	1,134,063	848	1,767	–	–
	1,997,598	364,362	1,134,063	446,048	779,364	4,721,435	3,801,326
Fixed Assets (Note 4)	7,800,743	–	–	146,494	–	7,947,237	4,698,781
	$ 9,798,341	$ 364,362	$ 1,134,063	$ 592,542	$ 779,364	$12,668,672	$ 8,500,107
Liabilities and Equity							
Liabilities:							
Accounts payable	$ 1,103,427	$ –	$ –	$ 11,668	$ 8,160	$ 1,123,255	$ 1,253,776
Deferred revenue	4,645	–	–	–	–	4,645	2,406
	1,108,072	–	–	11,668	8,160	1,127,900	1,256,182
Equity:							
Fund balance (Statement 3)	8,690,269	364,362	1,134,063	580,874	771,204	11,540,772	7,243,925
	$ 9,798,341	$ 364,362	$ 1,134,063	$ 592,542	$ 779,364	$12,668,672	$ 8,500,107

(See accompanying notes to the financial statements)

FINANCIAL STATEMENTS

Year Ended March 31, 1986

SASKATCHEWAN CANCER FOUNDATION
STATEMENT OF REVENUE AND EXPENDITURE

Statement 2

Year Ended March 31

	1986						1985
	General Fund	Major Equipment Grant Fund	Saskatoon Clinic Construction Fund	Research Fund	Trust Fund	Total	Total
Revenue:							
Grants – Department of Health	$ 15,011,780	$ 1,000,000	$ 1,668,652	$ 348,300	$ –	$ 18,028,732	$ 15,361,599
– Other	94,053	–	–	47,259	–	141,312	134,404
Donations and Bequests	–	–	–	–	129,124	129,124	103,282
Investment income	254,220	40,719	17,164	49,346	79,711	441,160	464,783
Other income	186,826	–	–	–	–	186,826	157,266
	15,546,879	1,040,719	1,685,816	444,905	208,835	18,927,154	16,221,334
Expenditures:							
Clinics and general administration							
Salaries and employee benefits	6,960,675					6,960,675	6,430,245
Medical services	4,432,750					4,432,750	4,117,122
Drugs and medical supplies	1,502,969					1,502,969	1,285,114
Purchased services							
– laboratory services	285,524					285,524	302,014
– diagnostic radiology	437,818					437,818	365,796
– isotope services	144,688					144,688	171,606
– operating room services	49,873					49,873	45,988
Computer services	157,178					157,178	185,463
Consultant fees	31,059					31,059	218,893
Equipment purchases and leasehold alterations	162,397	1,508,971	551,753		5,691	2,228,812	1,785,182
Postage, printing and stationery	111,892				1,254	113,146	106,987
Repairs and maintenance of equipment	42,141					42,141	72,856
Telephone	81,564					81,564	88,038
Travel and staff development	99,839				3,099	102,938	113,156
Other expenditures	401,691				20,257	421,948	361,164
Patient lodges (Note 8)							
Salaries and employee benefits	253,368					253,368	132,654
Other lodge operating costs	146,372					146,372	89,982
Grants:							
Research grants (Schedule 1)				446,850		446,850	406,947
Trust Fund grants					36,610	36,610	3,200
	15,301,796	1,508,971	551,753	446,850	66,911	17,876,283	16,282,407
Excess of revenue over expenditures (expenditures over revenue) – to Statement 3	$ 245,081	$ (468,252)	$ 1,134,063	$ (1,945)	$ 141,924	$ 1,050,871	$ (61,073)

(See accompanying notes to the financial statements)

FINANCIAL STATEMENTS

Year Ended March 31, 1986

SASKATCHEWAN CANCER FOUNDATION
STATEMENT OF FUND BALANCE

Year Ended March 31

Statement 3

	1986						1985
	General Fund	Major Equipment Grant Fund	Saskatoon Clinic Construction Fund	Research Fund	Trust Fund	Total	Total
Accumulated surplus:							
Balance, beginning of year	$ 646,925	$ 832,614	$ –	$ 436,325	$ 629,280	$ 2,545,144	$ 2,627,898
Add (deduct):							
Excess of revenue over expenditures (expenditures over revenue) (Statement 2)	245,081	(468,252)	1,134,063	(1,945)	141,924	1,050,871	(61,073)
	892,006	364,362	1,134,063	434,380	771,204	3,596,015	2,566,825
Deduct:							
Final settlement recovery – previous year	(2,480)	–	–	–	–	(2,480)	(21,681)
Balance, end of year	889,526	364,362	1,134,063	434,380	771,204	3,593,535	2,545,144
Equity in fixed assets:							
Balance, beginning of year	4,548,732	–	–	150,049	–	4,698,781	3,535,553
Add:							
Fixed assets purchased by:							
– General Fund – net of disposals	165,855	–	–	–	–	165,855	471,312
– Major Equipment Grant Fund	1,508,971	–	–	–	–	1,508,971	1,294,979
– Saskatoon Clinic Construction Fund	551,753	–	–	–	–	551,753	–
– Research Fund (Note 5)	–	–	–	23,399	–	23,399	60,303
– Trust Fund	5,691	–	–	–	–	5,691	8,132
Fixed assets donated (Note 8)	1,848,392	–	–	–	–	1,848,392	–
	8,629,394	–	–	173,448	–	8,802,842	5,370,279
Deduct:							
Provision for depreciation	(828,651)	–	–	(26,954)	–	(855,605)	(671,498)
Balance, end of year	7,800,743	–	–	146,494	–	7,947,237	4,698,781
Fund balance, end of year – to Statement 1	$ 8,690,269	$ 364,362	$ 1,134,063	$ 580,874	$ 771,204	$ 11,540,772	$ 7,243,925

(See accompanying notes to the financial statements)

FINANCIAL STATEMENTS

Year Ended March 31, 1986

SASKATCHEWAN CANCER FOUNDATION
NOTES TO THE FINANCIAL STATEMENTS

March 31, 1986

1. **Legal Status of the Saskatchewan Cancer Foundation**

The Foundation was created under provisions of The Saskatchewan Cancer Foundation Act, 1979 and commenced operations on August 1, 1979.

Under Section 38(1) of the Act, the Foundation acquired ownership of the assets and rights and assumed responsibility for the debts, liabilities, and obligations of the Government of Saskatchewan and the Saskatchewan Cancer Commission relating to the operation of the clinics in Regina and Saskatoon under The Cancer Control Act.

2. **Significant Accounting Policies**

a) **Fixed Assets and Depreciation**

The Saskatchewan Cancer Foundation utilizes fund accounting wherein all revenues and expenditures including those for fixed assets appear in the statement of revenue and expenditure. To maintain accountability for fixed assets, it is necessary to record them as assets with a corresponding entry to "equity in fixed assets". All fixed assets costing $100 or more are recorded in this manner.

Fixed assets purchased through the Major Equipment Grant Fund, the Saskatoon Clinic Construction Fund and the Trust Fund are presented as assets of the General Fund. These acquisitions are not included in the fixed asset expenditures of the General Fund but are recorded as expenditures in the Fund to which they apply. Assets purchased by the Research Fund are recorded as assets of that Fund. Donated assets are recorded at their estimated cost in the General Fund as a credit to "equity in fixed assets".

Fixed assets of the Foundation are depreciated on a straight-line basis over their estimated useful lives at rates ranging from 5% to 20% per annum.

As the acquisition of fixed assets is primarily financed by government grants, a provision for depreciation is not charged to operations but is charged to "equity in fixed assets" to reflect the decrease in the undepreciated cost of the fixed assets.

b) **Grant Revenue and Final Settlement Adjustments**

Grant revenue from the Department of Health is recorded on the accrual basis exclusive of any adjustments that may be determined by the Department of Health during its final settlement review, subsequent to the current fiscal year.

In accordance with the funding policy of the Department, any operating surplus, exclusive of donations and investment income, is repayable to the Department after the final settlement review is complete. A deficit on operations is the responsibility of the Foundation unless a prior commitment for reimbursement has been recognized by the Department.

Any surplus repayable or deficit recoverable are recorded in the year the final settlement review is completed as an adjustment to accumulated surplus.

c) **Research Grants**

Research grants awarded by the Foundation to aid in funding approved research projects are charged to expenditure in the year in which costs are incurred on the projects.

d) **Donations**

All donations are treated as revenue of the Trust Fund, which has specifically been established to administer such revenue and related expenditures.

Certain contributions to the Trust Fund are designated by the contributors to be used for such purposes as cancer research, equipment and library books. The Foundation maintains a record of the funds contributed and spent for each of the designated purposes until such funds are fully utilized (See Note 3).

e) **Investment Income — Major Equipment Grant Fund and Saskatoon Clinic Construction Fund**

Unexpended monies of the Major Equipment Grant Fund and of the Saskatoon Clinic Construction Fund held in the General Fund, are invested in short-term securities. The interest derived from these investments is credited to the relevant fund.

3. **Restricted Trust Funds**

At March 31, 1986, a balance of $192,645 ($131,312 at March 31, 1985) remained to be used for the purposes designated by the contributors.

4. **Fixed Assets**

	1986			1985
	Cost	Accumulated Depreciation	Net Book Value	Net Book Value
a) General Fund				
Land and improvements	$ 285,002	$ 1,225	$ 283,777	$ 73,144
Buildings	2,843,209	191,973	2,651,236	1,151,829
Asset under construction	775,176	—	775,176	223,423
Leasehold alterations	540,941	127,177	413,764	66,809
Equipment and furniture	6,839,433	3,162,643	3,676,790	3,033,527
	$ 11,283,761	$ 3,483,018	$ 7,800,743	$ 4,548,732
b) Research Fund				
Equipment and furniture	$ 230,544	$ 84,050	$ 146,494	$ 150,049

5. **Research Fund**

The Department of Health has provided grants to enable the Foundation to support a number of research projects. The Department has attached the following guidelines to the grants:

a) expenditure of grant funds will be at the discretion of the Foundation. The Foundation will assume responsibility for research costs in excess of the amount granted;

b) research funds, including investment income on the funds, will be kept separate from other funds of the Foundation.

The Foundation has met these guidelines by establishing the Research Fund, separate from other funds of the Foundation, from which research grants are made.

Included in Research Grants are expenditures totalling $23,399 (1985 — $60,303) for fixed assets required for certain research projects. Ownership of these assets is retained by the Foundation.

At March 31, 1986, the Research Fund was committed to expenditures totalling $285,482 ($316,537 at March 31, 1985), being the unexpended portion of approved research project awards.

6. **Major Equipment Grant Fund**

The Department of Health has advised the Foundation of its intention to provide grant funds totalling $5,000,000 for the acquisition of certain major equipment in the period 1983 to 1988. These grant funds are to be paid in semi-annual installments of $500,000 commencing July 1, 1983. The funds are to be accounted for separately from other equipment grants made through the regular budgetary process thereby permitting any unexpended funds from a preceding year to be carried forward.

At March 31, 1986, there were no outstanding orders (1985 — $1,063,280) for major equipment.

7. **Saskatoon Clinic Construction Fund**

During the year, the Department of Health advised the Foundation of its intention to provide grant funds totalling $16 million over the fiscal years, 1985-86 to 1988-89 to complete the design and construction of a new cancer clinic facility in Saskatoon. These funds are to be paid in varying installments each year.

Similar to the Major Equipment Fund, the funds for Saskatoon Clinic Construction are to be accounted for separately from other funding made through the regular budgetary process. Note 10 discloses a change in the funding mechanism for this project, and will apply to the capital grant received in 1985-86.

As at March 31, 1986, contracts had been awarded committing $13,039,801 to the construction of the new facility.

8. **Cancer Patient Lodges**

The Canadian Cancer Society, Saskatchewan Division, has donated two cancer patient lodges in the province to the Foundation. Under the terms of the agreement with the Society, the Foundation has assumed responsibility for the operations of these lodges. Title to the property will remain with the Foundation so long as it is operated as a cancer patient lodge.

Title to the property for the 28 bed fully equipped lodge in Saskatoon was transferred to the Foundation in 1983-84. The estimated cost of this lodge's land, building and equipment is $1,443,333.

The 28 bed fully equipped lodge in Regina was donated in 1985-86, with the final agreement and transfer of title occuring in April, 1986. The estimated cost of this lodge's land, building and equipment is $1,848,392.

In accordance with the accounting policy of the Foundation, the above lodges are recorded in these financial statements as "Fixed Assets" and "Equity in Fixed Assets."

9. **Related Party Transactions**

Included in these financial statements are expense amounts resulting from transactions conducted with the hospitals in which the cancer clinics are located. Account balances resulting from these transactions are included in the statement of financial position and are settled on normal trade terms.

In addition, in accordance with signed agreements with the hospitals in which the cancer clinics are located, the Foundation has not been charged with occupancy costs relating to the clinics, but leases the clinics for $1 each per year.

10. **Subsequent Events**

Cancer Clinic — Saskatoon

Subsequent to March 31, 1986, an agreement was signed between the Saskatchewan Cancer Foundation, the Province of Saskatchewan and Saskatchewan Property Management Corporation which indicates that the capital grants received during the current fiscal year for the Saskatoon Clinic Construction are to be converted to a loan obligation. The Foundation will only be required to repay this loan, including any interest accrued thereon, if the Province of Saskatchewan provides grants to make the payments.

11. **Comparative Financial Information**

Certain comparative figures have been reclassified in order to conform with the current year's presentation.

Schedule 1

SASKATCHEWAN CANCER FOUNDATION
RESEARCH FUND
SCHEDULE OF RESEARCH GRANTS
Year Ended March 31

	1986	1985
Participation in North Central Cancer Treatment Group	$ 61,907	$ 61,111
Hyperthermia Project, Regina	–	2,957
Automatic Compensator Project, Regina	–	99
Human Tumor Stem Cell Assay, Saskatoon	55,509	50,649
Patient Positioning Devices Project, Saskatoon	–	21,642
Optical Patient Contour Measurement Project, Saskatoon	1,153	33,631
Extension of Treatment Planning Function, Regina	17,787	16,099
Lung Cancer and Farming Study, Saskatoon	53,150	57,283
Chemotherapeutic Agents in Patients, Saskatoon	6,776	33,617
Automated Set-Up of Linear Accelerator, Regina	–	11,040
Radiotherapy Automation Project, Regina	36,421	3,760
Participation in Children's Cancer Study Group	59,083	48,080
Cellular Oncogenes in Human Lung Cancer, Saskatoon	10,141	21,793
Participation in Radiation Therapy Oncology Group	28,342	6,801
Pharmacological Studies of Chemotherapeutic Agents in Cancer Patients, Saskatoon	27,757	23,124
Review of Treatment Results, Regina	26,992	10,556
Skin Cancer in Saskatchewan, Saskatoon	4,815	4,556
Dynamic Cardiac Phantom, Regina	–	80
Breast Cancer Project, Saskatoon	2,256	69
Radiation Area Surveillance System, Saskatoon	5,966	–
Digital Imaging Techniques, Saskatoon	11,175	–
Dose Calculation, Regina	26,937	–
Flow Cytometer/Cell Sorter, Saskatoon	6,373	–
Digital Imaging of Megavoltage Photon Beams, Saskatoon	2,898	–
Evaluation of In Vitro Chemosensitivity, Regina	1,412	–
	$ 446,850	$ 406,947

RESEARCH PROJECTS

MEMBERSHIP IN THE NORTH CENTRAL CANCER TREATMENT GROUP

Klaassen, D. J. and Poon, M. A. in collaboration with the medical staff of the Saskatoon Cancer Clinic, Saskatoon and the Allan Blair Memorial Clinic, Regina.

The North Central Cancer Treatment Group (NCCTG) is a Co-operative Oncology Group based out of the Mayo Clinic in Rochester, Minnesota, which in addition participates in the studies of another large American Oncology Group — the Eastern Co-operative Oncology Group (ECOG). During the past year we entered 46 patients on study in a variety of protocols, primarily in the area of gastro-intestinal cancer, and participated in the two work meetings of the group held in October of 1985 and April of 1986. Dr. Little of the Saskatoon Cancer Clinic, is co-principal investigator for a pilot study for Advanced Small Cell Carcinoma of the Lung and Dr. Klaassen is co-principal investigator for the Advanced Colorectal Chemotherapy Protocol.

During this past year an audit team from the North Central Group favorably reviewed our activities. We receive part of our funding for our membership from the NCCTG, although the major portion is provided by the Saskatchewan Cancer Foundation. The Foundation staff continues to view our involvement as an important research activity which as well, provides a quality standard for other treatments in the Clinics.

ENHANCEMENT OF TREATMENT PLANNING FUNCTION

Dickof, P. A. and Winnicki, A.

In the past year, the treatment planning system written under the aegis of this project was put into clinical use in the Allan Blair Memorial Clinic. Work on the display of simulator images has progressed, and a storage and enhancement facility for these images is now in clinical use. Work continues on the display of isodoses together with these images, and on a three dimensional display of patient contours and treatment parameters.

SASKATCHEWAN LUNG CANCER AND FARMING COLLABORATIVE STUDY

Klaassen, D. J., Dosman, J. A., McDuffie, H. H., and Cockcroft, D. W.

This study was designed to explore the possibility that farmers in Saskatchewan may be at increased risk to develop lung cancer due to the interaction of occupational exposure to dusts and chemicals, cigarette smoking and familial factors. We have demonstrated that the association between farming and lung cancer in males is not a simple phenomenon. The pesticides used and the pattern of use has been shifting dramatically. Cigarette smoking as a powerful confounder has been carefully appraised. Preponderance of lifetime nonsmoking males who developed lung cancer since 1979 are farmers.

We have found that patients with lung cancer are less likely to have experienced allergies and less frequently have positive reactions to allergy skin prick tests.

We have found significant male/female differences among patients with lung cancer. Females have a lower mean age at diagnosis, start smoking later, smoke fewer years and have a different distribution of cell types compared to males. We have been unable to pinpoint any occupational exposures or familial factors which might account for this apparent increased susceptibility of females.

RESEARCH PROJECTS

PHARMACOKINETIC STUDIES OF CHEMOTHERAPEUTIC AGENTS IN CANCER PATIENTS

Maksymiuk, A.W.

Information concerning pharmacokinetics of anticancer agents aid in optimizing chemotherapy treatments. Several new antitumor antibiotics are being studied to determine drug levels in serum, distribution volumes and excretion patterns in association with clinical trials of these agents at the Saskatoon Cancer Clinic. Mitoxantrone, a new anthraquinone derivative is being studied in intrahepatic arterial infusions in patients with hepatomas and other tumors localized in the liver. Epirubicin, an analog of adriamycin is being evaluated in dose escalation studies in patients with advanced breast cancer. In the latter study, the effects of significant dose escalation on responses and pharmacokinetics are being evaluated.

C-MYC ONCOGENE AMPLIFICATION IN HUMAN LUNG CANCER

Little, C. D.

This project is attempting to evaluate whether amplification of c-myc oncogene can be demonstrated to be amplified using an immunoperoxidase technique. The findings on pathologic slides will be correlated with a clinical course of patients from the cancer registry and a correlation attempted between prognosis, tumor biology and the amplification of c-myc oncogene.

DYNAMIC CARDIAC PHANTOM

Sloboda, R. S.

This research project continues to await complementary funding and has not progressed beyond the stage described in the 1984-85 Annual Report.

AFFILIATE MEMBERSHIP IN THE RADIATION THERAPY ONCOLOGY GROUP

McGowan, D. G. and Staff, Radiation Oncology Department, Saskatoon Cancer Clinic

The Saskatoon Cancer Clinic has affiliate status with this group. As a result, the Department has access to treatment protocols in Radiation Therapy which are designed to answer important questions in the treatment of malignancy. The staff of the clinic have membership on some committees of the group and, in addition, are co-chairmen of studies. The Saskatchewan Cancer Foundation provides funding for this activity which supports a Data Manager/Radiation Oncology Nurse, as well as travel costs involved in attending the semi-annual meetings.

CELL SURFACE MARKER AND COLONY CULTURE STUDY OF LEUKEMIAS AND LYMPHOMAS

Skinnider, L. F. and Maksymiuk, A. W.

The clearer identification of the cell type of the various malignancies has been greatly improved with the use of monoclonal antibodies raised against specific antigens in the leukemic and lymphomatous cells. This assists in choosing the optimal therapy for the patient. All leukemias and most lymphomas are now being typed using this methodology and in addition the growth behaviour of the cells in semi-solid media under different culture conditions is being evaluated. Correlation of the growth behaviour with the clinical course is being carried out.

RESEARCH PROJECTS

RADIOTHERAPY AUTOMATION PROJECT

Schmid, M. G.

The Radiotherapy Automation Project was established to enable the development of new devices that could be used to automate some of the aspects of providing radiotherapy treatments to cancer patients. During the past few years, this project has resulted in the development of a number of new devices which are now in everyday clinical use.

During the past year, another device developed under this research grant has been put into clinical service. This device, a three-dimensional patient contouring machine, is used to measure the surface contour of a patient and pass this information to the treatment planning computer where it is used in the patient dose calculation process. Although this new device is more advanced than previous devices used for this purpose, it has actually reduced the computational burden of the treatment planning computer since it contains its own microcomputer system to handle much of the necessary computation.

A good deal of basic research into the development of a real-time imaging system for patient positioning on high energy radiotherapy machines has been done. The development of such a device would greatly enhance the ease and accuracy of providing radiotherapy treatments. The construction of a small prototype is now underway.

RADIATION AREA SURVEILLANCE SYSTEM

Reid, W. B. and Hummel, R. H.

Prototype hardware required for the overall system has been tested and is in place. Off-the-shelf components acquired and tested include a clock calendar and multi-channel analyzer boards. Some progress has been made in software development and this will be a large part of our immediate effort. We plan to switch to scintillation detectors which have a much longer life than geiger tubes, although nominally they are more fragile.

APPLICATION OF DIGITAL IMAGING TECHNIQUES

Ago, C. T. and Baillie, A. D.

In this project, a software package has been developed to utilize image-handling apparatus installed in the clinic. This allows capture, storage and enhancement of images for a number of sources. It is intended to examine the ability of this system to impact on the radiation oncologist's practice. The areas to be initially examined are concerned with the enhancement of beam portal films, which are of inherently low contrast, and with the improvement of images captured from the simulator fluoroscopy chain.

FLOW CYTOMETER/CELL SORTER FACILITY

Warrington, R.C.

Funds awarded from this research project played a crucial role in the continued functioning of, and expanded access to, the flow cytometer/cell sorter facility and its role in cancer research at the University of Saskatchewan. Because of these funds, it has been possible to re-hire the devoted operator. Consequently, significant progess in numerous fronts has been made. While space constraints preclude a comprehensive presentation, the following represent selected examples of studies performed: analysis of the mode of action of novel alkylating agents; quantitation of membrane alterations associated with the appearance of the metastatic

phenotype; characterization of anticancer-drug movement in and out of drug-resistant human tumor cells; and a variety of assessments of the effects of, and mechanism of action of, L-histidinol on drug-vulnerability in diverse tumor cells. A considerable number of other projects are on-going. In general, the facility is meeting the needs of cancer researchers to a much greater extent than was possible in the past.

DIGITAL IMAGING OF MEGAVOLTAGE PHOTON BEAMS

Hummel, R. H. and Baillie, A. D.

In order to confirm the accuracy of patient treatment in radiotherapy, portal radiographs are taken during the patient's exposure on several occasions during the course of treatment. This is time-consuming and expensive, and generally only evaluates the treatment accuracy after the fact. This project aims to develop apparatus to acquire a portal image directly and display it interactively on a CRT.

Design parameters for a multi-cell two-dimensional ionization chamber have been evaluated. This has involved extensive development in chamber design and in electronic circuitry.

SOFTWARE INFRASTRUCTURE DEVELOPMENT

Baillie, A. D.

Large quantities of computer software have been developed by physics staff in the Cancer Foundation over many years, some of it supported by the Research Fund. This tends to be poorly documented and written with idiosyncratic style and structure. The implementation of this software on the VAX computers in the two clinics has proceeded along disparate lines.

This project aims to develop a unified, Foundation-wide approach to the development of physics and clinical care software. This will provide the framework such that compatibility between clinics is maintained; develop standards which program code should meet; develop standards for program documentation; develop tools to assist programmers to meet these standards; and update code applicable to the treatment planning efforts such that it will meet the standards.

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POLICIES

POLICIES GOVERNING ADMISSION TO THE CANCER CONTROL PROGRAM AND PAYMENT OF SERVICES

CANCER CLINIC REFERRAL

Any person who has cancer (or allied disease defined as precancerous or premalignant conditions, carcinoma-in-situ, and certain conditions which antedate cancer), or is suspected of having such, may be referred by a doctor and an appointment requested by telephone, letter or referral form (available from the Clinics). Persons referred to the Clinics, who have been resident in the Province of Saskatchewan for 3 months, are eligible for admission to the cancer program. Wherever possible, in order to substantiate the diagnosis of cancer, it is recommended routine diagnostic evaluation be done by the family physicians or through referral to appropriate specialists prior to being referred to the Cancer Clinics.

INVESTIGATIVE SERVICES

Investigative services carried out, or authorized by the clinics, may include full history and physical examination; diagnostic radiologic services; diagnostic laboratory and pathologic services; radioisotopic procedures; specialty consultations; authorized diagnostic or exploratory surgery performed by suitably qualified and approved medical practitioners in private practice. Fees for such authorized services are a responsibility of the Cancer Foundation.

If a diagnosis of cancer is not substantiated, the patient is discharged from the clinic and referred back to his attending physician. He is **no longer** the financial responsibility of the Cancer Foundation.

PRE-ADMISSION DIAGNOSTIC PROCEDURES LEADING TO A DIAGNOSIS OF CANCER

Payment may be authorized for the following diagnostic procedures carried out by a medical practitioner prior to referral and admission of the patient to the Cancer Control Program, if the findings **are positive**, and the patient is **referred** and admitted to a cancer clinic **within 14 days:**

Biopsy of skin including lip

Lymph node biopsies

Fine needle biopsy or aspirate cytology

Simple biopsy of cervix

Cone biopsy of cervix performed by a qualified surgeon

Dilation and curettage

Prostatic biopsies

Endoscopy (Esophagoscopies, Bronchoscopies, Gastroscopies, Colonoscopies)

Cystoscopy

Sigmoidoscopy

Angiography

Aortography

Encephalography

Ventriculography

Myelography

N.B. Breast Biopsy is excluded unless performed by a qualified surgeon

Any other pre-admission diagnostic services are not the responsibility of the Cancer Foundation.

POLICIES

PRE-ADMISSION SURGICAL PROCEDURES LEADING TO A DIAGNOSIS OF CANCER

The Saskatchewan Cancer Foundation **cannot** recognize any claim for medical care of a cancer patient unless the patient is registered with the Cancer Program, excepting when an **emergency operation** is necessary for a cancerous condition, and the cancer clinic is informed within 7 days. Similarly, when an operation is performed on a provisional diagnosis of a benign condition, and a cancerous condition is found to be the principal disorder present, although not previously suspected, the Cancer Foundation will accept responsibility. Under certain or special circumstances, a patient may be admitted to the Cancer Control Program without personal attendance at a clinic. This applies in the case of certain skin cancers, completely excised; carcinoma-in-situ of the cervix, and certain other gynecological and urological cancers not requiring consultation or multimodal therapy. The cancer clinic, however, must be notified of the diagnosis, treatment and plans for management, and receive a copy of all pertinent records within the time limits mentioned. Certain surgical cases completely assessed at a major hospital may be authorized by the surgeon communicating with the Director of the cancer clinic by letter or by telephone. It is necessary in such cases that all pertinent records and reports be sent within the 14-day limit for purposes of registration, documentation and authorization of payment for the accounts by the Saskatchewan Cancer Foundation.

POSTMORTEM DISCOVERY OF CANCER

Accounts in connection with the management of a patient who is found at postmortem to have cancer, are **not** the responsibility of the Cancer Foundation and should be processed through the other payment agencies with the statement that the diagnosis was **not** known prior to postmortem examination.

TREATMENT SERVICES

Surgical

When investigation discloses cancer, and surgical treatment is indicated, the patient or his referring physician may choose a surgeon; the final choice of surgeon always rests with the patient. In the exceptional case, when neither the referring physician nor the patient has a preference, then a roster is used to assist the patient in selecting his surgeon.

The Saskatchewan Cancer Foundation will pay surgeons at specialty rates for procedures authorized by the Foundation, provided the surgeon is Certified or is a Fellow of the Royal College of Physicians and Surgeons of Canada, and is on the list of the College of Physicians and Surgeons of Saskatchewan for payment at specialty rates. Furthermore, the surgeon must have previously applied to the Executive Director of the Saskatchewan Cancer Foundation to have his/her name included on the Surgical Roster of the Foundation, and must provide evidence that his/her practice is located in a community with adequate hospital facilities including radiology, pathology, surgical and anesthetic services, and suitably trained personnel to operate such facilities.

In cases of unusual difficulty, or requiring possible multimodal therapy, it is recommended that preoperative consultation and authorization be obtained from the Foundation.

Surgeons wishing to make application for an appointment to the Saskatchewan Cancer Foundation for inclusion on the surgical roster, should write to the Executive Director, Saskatchewan Cancer Foundation, Suite 400 Parliament Place, 2631 28th Avenue, Regina, Saskatchewan S4S 6X3.

Breast Cancer

It is the policy of the Saskatchewan Cancer Foundation that biopsy and elective surgery for patients with suspected breast cancer be carried out by qualified surgeons in hospitals with a qualified pathologist and facilities for the performance of major surgery.

Unless these conditions are met, financial responsibility for breast surgery will not be assumed by the Cancer Foundation.

POLICIES

Medical

The Saskatchewan Cancer Foundation will pay internists and pediatricians for definitive chemotherapeutic management of leukemias and lymphomas, provided:

- they are certified in medicine or pediatrics by the Royal College of Physicians and Surgeons of Canada, or hold the F.R.C.P. (Canada); and have had past experience or special training in the use of cancer chemotherapeutic agents;
- the patient has been admitted to the Cancer Control Program;
- there is cooperation with the medical staff of the cancer clinic to ensure:
  - i) initial and continuing provision of the chemotherapeutic drugs;
  - ii) appropriate safeguards for the patient against untoward toxicity;
  - iii) the keeping of detailed clinical and laboratory records of the progress of the patient, at the cancer clinic.

Specialists' consultations are paid when authorized by a Clinic Director.

Medical care of complications directly related to surgery for cancer is payable by the Saskatchewan Cancer Foundation.

Supportive medical care required by special medical circumstances and provided by a qualified internist is also payable by the Cancer Foundation.

Radiotherapeutic

All radiotherapeutic treatment is performed by the staff of the cancer clinic involved.

Chemotherapeutic

A wide range of chemotherapeutic drugs, proven to be useful in the control of cancer are in use by the medical staff of the cancer clinic involved. These drugs are provided without charge to the patient.

Certain drugs may be provided to the practicing physician for administration to his patient, under the general supervision of the cancer clinic staff or approved consultants provided:

- the patient has been previously admitted to the Cancer Control Program;
- the drug may have usefulness in the management of the patient's cancer;
- the toxicity of the drugs is low, or the tolerance of the patient for the drug has been determined previously by the medical staff of a cancer clinic; or the patient is in the advanced stage of his illness;
- regular clinical and laboratory reports in the required detail are submitted to a cancer clinic.

Accounts concerning the administration of these drugs, or day to day supervision of such patients, may be paid by the Saskatchewan Cancer Foundation.

FOLLOW-UP (REVIEW) SERVICES

When treatment for cancer is completed, and the patient is ready to return home, arrangements are made for follow-up examinations. The family doctor or specialist may be requested by a Clinic Director to conduct review examinations. Requests for review examinations by either a specialist or the cancer clinic may be initiated by the family physician by letter to the Clinic Director. A specialist may make requests of the cancer clinic for review examinations as well by the same procedure.

Cancer patients are encouraged to consult their local physician for purposes of familiarization of the doctor with the progress of the patient, and for purposes of supportive treatment or advice related to their malignant conditions. Fees for such services are payable by the Cancer Foundation. A report of the examination must be submitted to the cancer clinic concerned. A correspondence fee, if appropriate, will be paid by the Cancer Foundation.

POLICIES

SUPPORTIVE CARE

Should the patient's condition be advanced at the time of the first examination by the family physician, his continuing care may be authorized **without prior personal attendance** at a clinic, provided the attending physician notifies the Clinic Director. Payment is on a fee-for-service basis.

DRUG SERVICES

Authorized cancer patients in hospital receive all drugs without direct charge. Drugs are **not** supplied as a benefit to out-patients, excepting for certain hormones and chemotherapeutic agents which are provided by the cancer clinics for active treatment of cancer, and certain replacement drugs made necessary by treatments directed towards the control of cancer.

SERVICES EXCLUDED FROM CANCER FOUNDATION RESPONSIBILITY

The travelling expenses of patients to and from clinics are **not** paid by the Saskatchewan Cancer Foundation.

Private or semi-private ward accommodation, and the services of private duty nurses are **not** paid by the Saskatchewan Cancer Foundation.

Medical care for pre-existing non-malignant disease is **not** the responsibility of the Saskatchewan Cancer Foundation.

Fees for authorized diagnostic or exploratory surgery, even though a benign condition be found, may be billed to the Saskatchewan Cancer Foundation. However, fees for concurrent, definitive treatment of benign conditions are **not** the responsibility of the Saskatchewan Cancer Foundation.

Medical and surgical services rendered to a person prior to admission to the Cancer Control Program are not payable by the Saskatchewan Cancer Foundation.

SERVICES AVAILABLE TO NON-CANCER CASES

Persons with non-malignant conditions may be referred to a cancer clinic for treatment by radiotherapy. Fees for medical and surgical services rendered to such persons are not payable by the Saskatchewan Cancer Foundation.

CORRESPONDENCE SERVICES

In the case of all patients, malignant or non-malignant, which may be seen initially or periodically at the clinics, a full report is mailed to the referring physician as soon as possible. If the patient is hospitalized, progress reports will be sent, either during hospitalization, or at the time of the patient's discharge to his home.

BILLING PROCEDURES

Physician accounts should be sent direct to the Medical Care Insurance Commission, 3475 Albert Street, Regina S4S 6X6, using the MCIC claim cards, as they process these accounts for payment on behalf of the Saskatchewan Cancer Foundation. All other accounts should be sent to the cancer clinic where the patient is registered.

SERVICES OUTSIDE THE PROVINCE

All requests for consultation or treatments which are not available in Saskatchewan, are made by contacting the Clinic Director of the cancer clinic concerned. Financial approval of such special out-of-province referrals may then be authorized by the Executive Director.

Requests on behalf of cancer patients are **not** to be sent to the Medical Care Insurance Commission.

Payment by the Foundation for out-of-province services is made under the following circumstances:

(1) When a patient has been referred out-of-province for consultation or

treatment not available in Saskatchewan, as outlined above, the cost of such treatment is paid by the Saskatchewan Cancer Foundation. The cost of hospital care is paid by the Saskatchewan Hospital Services Plan. Other costs such as travel, sustenance and accommodation are the patient's responsibility.

(2) The regulations regarding unsuspected and emergency treatment of cancer, apply outside the Province as well.

(3) If neither 1 or 2 apply, and a person receives definitive treatment outside the Province, the Saskatchewan Cancer Foundation will only assume financial responsibility, where:

(a) the attending physician was a specialist with qualifications recognized by the Saskatchewan Cancer Foundation;

(b) the appropriate cancer clinic receives complete clinical data from the attending physician including history, physical examination, operative and pathology reports and a discharge summary. The disposition of patient and arrangements for follow-up examinations should be included and subsequent reports sent to the cancer clinic;

(c) the person attends the cancer clinic for follow-up care immediately upon his return to Saskatchewan.

(4) Subsequent follow-up examinations may be conducted out-of-province provided a report is submitted by the attending physician(s).

(5) Advanced care may be conducted out-of-province, if the patient remains a resident of Saskatchewan or, for three months only, if the patient gives up Saskatchewan residence.

(6) When a Saskatchewan resident moves out of the province and establishes residence elsewhere, and develops cancer, the Saskatchewan Cancer Foundation will pay for medical and surgical management as outlined above, for a period of three months only from the date of departure.

In each case either the patient or his physician will be reimbursed at the same rates, and subject to the same conditions as if the services were provided in Saskatchewan.

CANCER DATA SERVICES

Since 1946 every effort has been made to collect complete statistical data concerning cancer in Saskatchewan. For each patient referred a record containing personal and clinic information is completed.

Also through the assistance of the practicing pathologists, copies of pathology reports of cancer are forwarded regularly to the appropriate cancer clinic.

The submission of such a pathology report of cancer by a pathologist is a statistical matter and does not constitute the referral of the patient to a cancer clinic.

CYTOLOGY SERVICES

The Provincial Cytology Laboratory is located in the Pasqua Hospital in Regina and provides all necessary equipment for the performance of cervical cytology technique upon request, without charge. A rapid reporting service acquaints the physician with the result by mail or telephone. A manual of instruction entitled "Prevention of Cancer, The Female Genital Tract — Saskatchewan", is available from the Provincial Cytology Laboratory, or from the Canadian Cancer Society (Saskatchewan Division), 101 - 2629 29th Avenue, Regina, Saskatchewan S4S 2N9.

POLICIES

CANCER PATIENT LODGE REFERRAL

The Lodge provides free accommodation for patients receiving treatment at the clinic who meet the following criteria:

Eligibility

- Patient must be registered with the cancer program in Saskatchewan
- Admission must be authorized by a cancer clinic physician
- Patients must be able to care for themselves and must not require any nursing care
- Lodge accommodation is intended for patients who reside outside a 50 km radius of the clinic
- Pediatric patients, age 16 or under, must be accompanied by a responsible adult.

Payment

- Accommodation is free for cancer patients who meet the above criteria
- There will be a per diem charge to patients from outside Saskatchewan
- One companion per patient may be accommodated at the Lodge **if space is available**. Companions will be charged a per diem rate.
- A companion required to accompany a pediatric patient is **not** charged.

HISTORICAL BACKGROUND

1929 The Saskatchewan Medical Association appointed a committee to study facilities available in the Province for treatment of cancer and recommended to the Minister of Health that a cancer program be established.

1930 The Saskatchewan Cancer Commission Act was passed which authorized a Commission to establish a cancer control program in Saskatchewan.

1931 Consultative diagnostic treatment clinics were opened at the Regina General Hospital and the Saskatoon City Hospital.

1939 The Regina Cancer Clinic was relocated to the Regina Grey Nuns' Hospital.

1944 The Cancer Control Act replaced the Saskatchewan Cancer Commission Act, and provided treatment at provincial expense for persons who had been resident in the province for more than six months.

1945 Radioactive isotopes were introduced to a limited extent at the clinics.

1947 The Canadian Cancer Society provided a personal service worker at each clinic to help in the personal needs of the patient.

1948 The Regina clinic moved to a newly constructed wing of the Regina Grey Nuns' Hospital and was named the Allan Blair Memorial Clinic in recognition of the contribution of the late Dr. Allan W. Blair to the program.

1949 A 25 million electron volt betatron was installed at the University of Saskatchewan and became available for treatment of patients with advanced cancer.

1951 The first cobalt unit in the world was designed and installed at the Saskatoon Cancer Clinic.

1954 The cancer clinic in Saskatoon was moved to the newly constructed University Hospital.

1958 Treatment was extended as an insured benefit to persons who had been resident in the province for more than three months.

1962 Insured benefits for cancer treatment were extended to Saskatchewan residents who received treatment outside the province.

1963 Renovation and expansion of radiotherapy facilities at the Allan Blair Memorial Clinic were completed.

1966 Insured benefits were extended to landed immigrants from the day of arrival.

1970 The Minister of Public Health established a study team to review and examine all aspects of cancer care in Saskatchewan and the report was made available in 1972.

1972 A new radiotherapy facility was opened at the Saskatoon Cancer Clinic which included a new 42 million electron volt betatron.

1973 The Cancer Control Act was amended to provide for the establishment of trust funds which could receive gifts, donations, bequests or grants.

A new Commission was appointed in April 1973.

1975 Nuclear medicine services were transferred from the cancer program to the Boards of the University Hospital and the South Saskatchewan Hospital Centre as hospital-based services.

HISTORICAL BACKGROUND

1978 Dr. T. A. Watson completed a study titled "A Report on Some Aspects of the Saskatchewan Cancer Program". Several recommendations were made in the report including the establishment of the Saskatchewan Cancer Foundation to replace the Cancer Commission and the purchase of a linear accelerator for the Allan Blair Memorial Clinic.

Construction was completed on the expanded and renovated radiotherapy facilities at the Allan Blair Memorial Clinic.

1979 The Saskatchewan Cancer Foundation Act was passed establishing a Foundation to replace the Cancer Commission. Under this Act, the Foundation conducts a program for the diagnosis, prevention and treatment of cancer.

1980 Renovations to the Allan Blair Memorial Clinic began with the construction of the chemotherapy treatment area.

1981 A Mevatron 77 Linear Accelerator was installed at the Allan Blair Memorial Clinic.

Construction of a 28 bed patient lodge in Saskatoon was begun.

1982 The newly renovated Allan Blair Memorial Clinic was officially opened on June 22, 1982.

In August, an eight day strike by unionized employees occurred and was ended by an Act of the Legislature.

1983 On April 8, 1983, the first Saskatchewan patient lodge was officially opened in Saskatoon.